

## ATTACHMENT 7

### Consumer Confidence Report Certification Form

(to be submitted with a copy of the CCR)

Water System Name: Ironwood

Water System Number: CA3601015

The water system named above hereby certifies that its Consumer Confidence Report was distributed on 6/21/13 (date) to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the California Department of Public Health.

Certified by: Name: Jalene Jaspers  
Signature: Jalene Jaspers  
Title: Safety Coordinator  
Phone Number: (760) 257-3503 Date: Sept. 21, 2013

To summarize report delivery used and good-faith efforts taken, please complete the below by checking all items that apply and fill-in where appropriate:

☒ CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used: Email

☐ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

☐ Posting the CCR on the Internet at www.

☐ Mailing the CCR to postal patrons within the service area (attach zip codes used)

☐ Advertising the availability of the CCR in news media (attach copy of press release)

☐ Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)

☐ Posted the CCR in public places (attach a list of locations)

☐ Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools

☐ Delivery to community organizations (attach a list of organizations)

☐ Other (attach a list of other methods used)

☐ For systems serving at least 100,000 persons: Posted CCR on a publicly-accessible internet site at the following address: www.

☐ For privately-owned utilities: Delivered the CCR to the California Public Utilities Commission

This form is provided as a convenience and may be used to meet the certification requirement of section 64483(c), California Code of Regulations.

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY  
1155 EAST 58TH STREET  
CHICAGO, ILLINOIS 60637

TO: THE DIRECTOR, NATIONAL BUREAU OF STANDARDS  
WASHINGTON, D.C. 20535  
FROM: DR. J. H. DILLON, JR.  
DEPARTMENT OF CHEMISTRY  
UNIVERSITY OF CHICAGO  
CHICAGO, ILLINOIS 60637  
SUBJECT: A STUDY OF THE KINETICS OF THE REACTION OF  
HYDROGEN PEROXIDE WITH VARIOUS SUBSTITUTED  
PHENOLS

The following report describes the results of a study of the kinetics of the reaction of hydrogen peroxide with various substituted phenols. The reaction was studied at 25°C. in a 0.1M sodium acetate buffer, pH 4.5. The reaction was followed by the method of initial rates. The rate of reaction was determined from the initial linear portion of the plot of the logarithm of the concentration of hydrogen peroxide versus time. The rate constants were determined from the slopes of the plots of the logarithm of the concentration of hydrogen peroxide versus time. The rate constants were found to be independent of the concentration of the substituted phenol, but dependent on the nature of the substituent group.

The reaction of hydrogen peroxide with various substituted phenols was studied at 25°C. in a 0.1M sodium acetate buffer, pH 4.5. The reaction was followed by the method of initial rates. The rate of reaction was determined from the initial linear portion of the plot of the logarithm of the concentration of hydrogen peroxide versus time. The rate constants were determined from the slopes of the plots of the logarithm of the concentration of hydrogen peroxide versus time. The rate constants were found to be independent of the concentration of the substituted phenol, but dependent on the nature of the substituent group.

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# 2012 Consumer Confidence Report

Water System Name: Ironwood

Report Date: June 2013

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2012 and may include earlier monitoring data.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Type of water source(s) in use: Wells

Name & location of source(s): Fundamental Christian Endeavors, Inc. dba Ironwood

49191 Cherokee Road

Newberry Springs, CA 92365

Drinking Water Source Assessment information: \_\_\_\_\_

Time and place of regularly scheduled board meetings for public participation: \_\_\_\_\_

For more information, contact: \_\_\_\_\_

Phone: (    ) \_\_\_\_\_

## TERMS USED IN THIS REPORT

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Variances and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND:** not detectable at testing limit

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (µg/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

**The sources of drinking water** (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Contaminants that may be present in source water include:**

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria*	3 (In a mo.)*	2	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year)		A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	5	0		15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	Not scheduled					Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)				none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)				none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic* (ppb or ug/L)	8/6/2012	42 ug/L*		10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride* (ppm or mg/L)	8/16/2012	5 mg/L*		2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm or mg/L)	8/3/2012	ND		45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Perchlorate	8/6/12	ND		6		

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Color	12-09-11	10.0		15		Naturally-occurring organic materials
Odor Threshold	12-09-11	1		3		Naturally-occurring organic materials
Turbidity	12/09/11	0.3		5		Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language

\*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

### Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

**Lead-Specific Language for Community Water Systems:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [INSERT NAME OF UTILITY] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

### Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
CC0000059	Failure to take the required number of repeat samples for each total coliform-positive sample on August 3, 7 2012		Reevaluated emergency procedures	
Total Coliform Bacteria	Detected 8/3, 8/7, 9/6 2012		Water system was treated according to the chlorination standards set forth by the county of San Bernardino and our Safety Manual and the problem was resolved.	Coliform are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.
Arsenic	Exceeds the MCL		Installed a reverse osmosis treatment system in April 2013.	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problem with their circulatory system, and may have an increased risk of getting cancer.
Fluoride	Exceeds the MCL		Installed a reverse osmosis treatment system in April 2013	Some people who drink water containing fluoride in excess of the federal MCL of 4mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth.

**For Water Systems Providing Ground Water as a Source of Drinking Water**

**TABLE 7 – SAMPLING RESULTS SHOWING  
FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES**

Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	(In the year)		0	(0)	Human and animal fecal waste
Enterococci	(In the year)		TT	n/a	Human and animal fecal waste
Coliphage	(In the year)		TT	n/a	Human and animal fecal waste

**Summary Information for Fecal Indicator-Positive Ground Water Source Samples,  
Uncorrected Significant Deficiencies, or Ground Water TT**

**SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE**


**SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES**


**VIOLATION OF GROUND WATER TT**

TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language

**For Systems Providing Surface Water as a Source of Drinking Water**

**TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES**

Treatment Technique <sup>(a)</sup> (Type of approved filtration technology used)	
Turbidity Performance Standards <sup>(b)</sup> (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to ____ NTU in 95% of measurements in a month. 2 – Not exceed ____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	
Highest single turbidity measurement during the year	
Number of violations of any surface water treatment	

requirements	
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- (a) A required process intended to reduce the level of a contaminant in drinking water.
- (b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.
- \* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.*

### Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language

### Summary Information for Operating Under a Variance or Exemption

April 2013 Reverse Osmosis treatment system was installed. We are following the county's schedule for sampling.